



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,662	06/04/2001	Thomas C. Wilson	A-7160	5765

7590 10/18/2006

Scientific Atlanta, Inc.
Intellectual Property Dept. MS 4.3.510
5030 Sugarloaf Parkway
Lawrenceville, GA 30044

EXAMINER

NG, CHRISTINE Y

ART UNIT	PAPER NUMBER
----------	--------------

2616

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/874,662	Applicant(s) WILSON, THOMAS C.	
	Examiner Christine Ng	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 5-19, 22, 24-36 and 38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-19, 22 and 24-34 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 14, 35, 36 and 38 is/are rejected.
- 7) ☒ Claim(s) 5 and 7-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The indicated allowability of claim 4 [currently combined with independent claims 1 and 35] and 6 is withdrawn in view of the newly discovered reference(s) to U.S. Patent No. 6,912,573 to Ohkado et al. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear how "the map of session numbers is a plurality of arrays" (line 2) when it was claimed in claim 1 that "the map of session numbers is an array of elements" (lines 4-5).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,219,358 to Pinder et al in view of U.S. Patent No. 6,912,573 to Ohkado et al.

Referring to claim 1, Pinder et al disclose in Figure 3 a method of allocating PID values to a program in a digital transport stream (transport stream 302), the digital transport stream including at least one program including of a plurality of elementary streams. Refer to Column 6, lines 60-62. The method comprises the steps of:

(a) Determining from a map of session numbers an unassigned session number (program number in PAT 304). As shown in PAT 304, all the program numbers for programs 0-K are different, so each program is given an unassigned program number. Refer to Column 8, lines 7-27.

(b) Assigning a session number (program number in PAT 304) to a session (program), wherein the session number is the determined unassigned session number, and wherein the session is associated with a program having a plurality of elementary streams (shown in respective PMTs 306). Refer to Column 8, lines 7-27.

(c) Associating a PMT_PID value with the session number (program number in PAT 304). "The PAT 304 identifies the PID for the packets containing the associated Program Map Tables (PMT) 306" (Column 8, lines 8-12).

(d) Assigning a set of PID values to the elementary streams of the program. "PIDs of all video, audio and data elementary streams that belong in the same program stream are listed in a PMT 306 with their associated PIDs" (Column 8, lines 13-19).

(e) Indicating in a map (PMTs 322,333) of allocable PID values the assigned PID values. PMT 322 lists the PIDs of elementary streams associated with program 1 and PMT 333 lists the PIDs of elementary streams associated with program 3. Refer to Column 8, lines 13-27.

Pinder et al do not disclose wherein the map of session numbers is an array of elements, each element of the array is associated with a session number and has an unassigned state and an assigned state.

Ohkado et al disclose in Figure 3 a method of establishing a session between a customer 130 and an agent 170. Session manager 117 searches for an unused entry in the session management table of Figure 7 to assign an unused session number. As shown in Figure 7, the map of session numbers is an array of elements (rows), and each row is associated with a session number 211 and an unassigned or assigned state 213. Refer to Column 10, line 45 to Column 11, line 43. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include wherein the map of session numbers is an array of elements, each element of the array is associated with a session number and has an unassigned state and an assigned state. One would be motivated to do so in order to organize the session numbers into an assigned or unassigned state, so that session numbers will not be reused.

Referring to claim 6, Pinder et al do not disclose wherein the map of session numbers is a plurality of arrays, each array of the plurality of arrays is associated with an output port.

Ohkado et al disclose in Figure 3 a method of establishing a session between a customer 130 and an agent 170. As shown in Figure 7, the map of session numbers is a plurality of arrays (rows), and each array (row) of the plurality of arrays is associated with an output port (socket1 217 or socket2 221). Refer to Column 10, line 45 to Column 11, line 43. Therefore, it would have been obvious to one of ordinary skill in the

Art Unit: 2616

art at the time the invention was made to include wherein the map of session numbers is a plurality of arrays, each array of the plurality of arrays is associated with an output port. One would be motivated to do so in order to coordinate the session numbers with particular output ports, so that different sessions can utilize different output ports for data transmission.

Referring to claim 14, Pinder et al disclose in Figure 3 that the method further includes allocating a first set of PID values (PIDs in PAT 304) for use as PMT_PIDs, wherein only PIDs from the first set of PID values are associated with PMT packets; and allocating a second set of PID values (PIDS in PMTs 306) for assignment to elementary streams of programs, wherein only PIDs from the second set of PID values are assigned to elementary streams of a program. Refer to Column 8, lines 7-27.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 35, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,219,358 to Pinder et al in view of U.S. Patent No., and in further view of U.S. Patent No. 6,775,257 to Watanabe.

Referring to claim 2, Pinder et al do not disclose that the method includes associating the session number with an output port, wherein the program that is associated with the session is transmitted from the output port.

Watanabe discloses in Figure 10 associating a session number (packet ID of program from PMT) with an output port (channels 32_1-34_1 to 32_n-34_n), wherein the program (PMT) that is associated with the session is transmitted from the output port (channels 32_1-34_1 to 32_n-34_n). The receiver (Figure 10) determines the CDM channel 32_1-34_1 to 32_n-34_n that contains the program that the user has designated. Refer to Column 8, lines 23-65 and Column 11, lines 48-57. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include associating the session number with an output port, wherein the program that is associated with the session is transmitted from the output port, the motivation being so that the programs can be transmitted to different output ports and the receiver can "receive only the packet that the user desires", thereby simplifying the configuration of the receiver and preventing it from consuming too much power. Refer to Abstract and Column 1, lines 31-37.

Referring to claim 35, Pinder et al disclose in Figure 3 an apparatus in a digital network that includes a transport stream (transport stream 302) having a plurality of programs included therein, wherein a program is defined by a set of elementary streams. Refer to Column 6, lines 60-62. The apparatus comprises:

Logic (PAT 304) for assigning a session number (program number in PAT 304), wherein the session (program) is associated with a program of the transport stream (transport stream 302). Refer to Column 8, lines 7-27.

Logic (PAT 304) for assigning a PMT_PID to the session. "The PAT 304 identifies the PID for the packets containing the associated Program Map Tables (PMT) 306" (Column 8, lines 8-12).

Logic (PMT 306) for allocating a set of PIDs to a set of elementary streams of a program. "PIDs of all video, audio and data elementary streams that belong in the same program stream are listed in a PMT 306 with their associated PIDs" (Column 8, lines 13-19).

Pinder et al do not disclose wherein the session numbers are from a session map, wherein the session number assigned to a session are one of an unassigned state and an assigned state. Refer to the Ohkado et al rejection part of claim 1.

Pinder et al also do not disclose that the apparatus includes an output port adapted to transmit a transport stream having at least one program, and wherein the logic for assigning a session number includes a map that associates the session number with the output port.

Watanabe discloses in Figure 10 an output port (channels 32_1-34_1 to 32_n-34_n) adapted to transmit a transport stream having at least one program, and associating a session number (packet ID of program from PMT) with an output port. The program (PMT) that is associated with the session is transmitted from the output port (channels 32_1-34_1 to 32_n-34_n). The receiver (Figure 10) determines the CDM channel 32_1-34_1 to 32_n-34_n that contains the program that the user has designated. Refer to Column 8, lines 23-65 and Column 11, lines 48-57. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an output port

adapted to transmit a transport stream having at least one program, and wherein the logic for assigning a session number includes a map that associates the session number with the output port. One would be motivated to do so so that the programs can be transmitted to different output ports and the receiver can “receive only the packet that the user desires”, thereby simplifying the configuration of the receiver and preventing it from consuming too much power. Refer to Abstract and Column 1, lines 31-37.

Referring to claim 36, Pinder et al disclose in Figure 3 that the value of the PMT_PID assigned to the session is related to the session number (program number in PAT 304) of the session. “The PAT 304 identifies the PID for the packets containing the associated Program Map Tables (PMT) 306” (Column 8, lines 8-12).

Referring to claim 38, Pinder et al disclose in Figure 3 that the logic (PAT 304) for assigning a PMT_PID includes a map of PID values (PAT 304). Refer to Column 7, lines 40-46 and Column 8, lines 7-12.

Allowable Subject Matter


8. Claims 15-19, 22 and 24-34 are allowed.
9. Claims 5 and 7-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

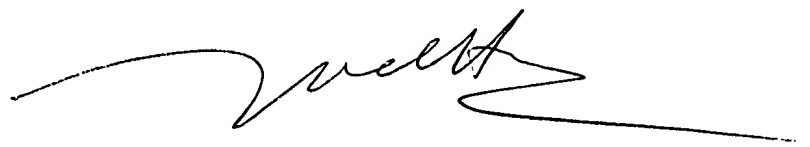
Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Ng whose telephone number is (571) 272-3124. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C. Ng 
October 2, 2006



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600